

REMARKS

In the aforementioned claim amendments, claims 1, 3 and 4 are amended. Now pending in the application are claims 1-5, of which claim 1 is independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Patentable Subject Matter

Claims 2-5 are indicated to recite patentable subject matter and be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph, set forth in the Office Action. In light of the aforementioned claim amendments, Applicants submit that claims 2-5 are in condition for allowance.

Claim Amendments

Claims 1, 3 and 4 are amended to clarify the scope of the claimed invention. In particular, claim 1 is amended to recite a pair of power output terminal plates, one attached to each end face of *a unit comprising* the stacked unit fuel cells. The claim amendment clarifies that the power output terminal plates are placed on both end sides of the stacked unit fuel cells. Claim 1 is also amended to change “the edge of each passage” to --an inner periphery of each passage-- to clarify the location of the grommet. Support for the claim amendment could be found in Figs. 1 and 7 and corresponding description in the specification. No new matter is added by this amendment and no new issues are raised. Applicants contend that the pending claims, as amended, are patentable and in condition for allowance.

Claim Rejections under 35 U.S.C. § 112

Claims 1-5 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In response to the rejections, Applicants amend claim 1 to recite a coolant supply passage, a drainage passage, a gas supply passage and an exhaust passage, as suggested by the Examiner. Applicants also amend claims 3 and 4 to recite a first engaging portion and a second engaging portion, as suggested by the Examiner. In light of the aforementioned claim amendments, Applicants request the Examiner to withdraw the rejections of claims 1-5 under 35 U.S.C. § 112, second paragraph.

Claim Rejections under 35 U.S.C. § 102

Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,426,159 to Kralick ("Kralick"). Applicants respectfully traverse this rejection in light of the above claim amendments and the following remarks, and request the reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) for the following reasons.

Claim 1 recites a fuel cell stack that includes a plurality of unit fuel cells. The fuel cell stack includes *a pair of power output terminal plates* each of which is attached to each end face of a unit comprising the stacked unit fuel cells. At least one of a coolant supply passage, a drainage passage, a gas supply passage and an exhaust passage is formed through the stacked unit fuel cells and *the power output terminal plates* in the stacking direction. The inner periphery of each passage through *the power output terminal plates* is covered with *a grommet* having an insulating capability.

Kralick discloses a fuel cell stack that includes a stack of flow plates, a first gasket and a second gasket. The first gasket is compatible with a coolant and the second gasket that is incompatible with the coolant.

Applicants respectfully submit that Kralick fails to disclose each and every essential elements of the claimed invention. Applicants submit that Kralick fails to disclose *a pair of power output terminal plates*, one attached to each end face of a unit comprising the stacked unit fuel cells, as recited in claim 1. Kralick discloses “flow plates,” which include bipolar plates (56, 62), cathode cooler plates (52, 58) and anode cooler plates (52, 58). However, the bipolar plates (56, 62), cathode cooler plates (52, 58) and anode cooler plates (52, 58) disclosed in Kralick do not correspond to the power output terminal plates recited in the claimed invention. Therefore, Kralick does not disclose a pair of power output terminal plates recited in the claimed invention.

Additionally, Applicants also submit that Kralick fails to disclose that at least one of a coolant supply passage, a drainage passage, a gas supply passage and an exhaust passage is formed *through the power output terminal plates* in the stacking direction, as recited in claim 1. Kralick discloses that a coolant passage is formed through the fuel cells or the flow plates, such as the bipolar plates (56, 62), cathode cooler plates (52, 58) and anode cooler plates (52, 58). Kralick, however, does not disclose that the coolant passage is formed through the power output terminal plates recited in the claimed invention.

Additionally, Applicants further submit that Kralick fails to disclose that *an inner periphery of each passage through the power output terminal plates is covered with a grommet* having an insulating capability, as recited in claim 1. Kralick discloses that the first gasket (102) and the second gasket (100) are arranged *between* the flow plates. In contrast, the grommet of the claimed invention is arranged *on* the inner periphery of each passage to cover the inner periphery of each passage. The claimed invention is to prevent a coolant from directly contacting the inner periphery of each passage. The first and second gaskets discloses in Kralick, however, are supposed to prevent the leakage of coolant, hydrogen and air between adjacent flow plates (*See* column 3, line 66 to column 4, line 7).

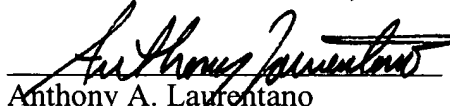
In particular, the grommet of the claimed invention is provided for the power output terminal plates. With this arrangement, the claimed invention is able to prevent the corrosion of the power output terminal plates due to a coolant or the like. The claimed invention is also able to prevent the occurrence of electric short circuits through the coolant and improve the flexibility of selection of the coolant. Kralick, however, does not provide these capabilities.

In light of the claim amendments and aforementioned arguments, Applicants submit that Kralick fails to disclose each and every elements of the claimed invention. Applicants therefore submit that claim 1 is in condition for allowance.

CONCLUSION

For the foregoing reasons, Applicants contend that Claims 1-5 define over the cited art. If there are any remaining issues, an opportunity for an interview is requested prior to the issuance of another Office Action. If the above amendments are not deemed to place this case in condition for allowance, the Examiner is urged to call Applicants' representative at the telephone number listed below.

Respectfully submitted,
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